APPENDIX A

STATEMENT OF WORK RAPID RESPONSE ACTIONS CAMP EDWARDS, MASSACHUSETTS MILITARY RESERVATION

I. OBJECTIVES

This Rapid Response Action (RRA) Scope of Work (SOW) identifies the components of work required for Rapid Response Actions (RRA) at RRA Areas of Concern. Under this SOW, the Respondent shall prepare, submit to EPA, and implement a Site-Specific Health and Safety Plan, a Quality Assurance Plan, and Work Plan(s). These plans will provide detailed descriptions of the work to be performed to eliminate any release of contaminants from the Training Ranges and Impact Area into the underlying aquifer.

The primary objectives of the Rapid Response Actions shall be to:

- A. Eliminate current and potential sources of contaminants to the aquifer from soils and sediment in Areas of Concern identified by EPA;
- B. Develop and implement monitoring plan(s) to assess compliance with the performance standards for source control measures specified in item A above;
- C. Restore areas disturbed by the action, particularly vegetation and habitat; and
- D. Excavate, treat and/or dispose of contaminated sediments, soils, debris and other materials generated during the Rapid Response Actions.

Currently identified RRA Areas of Concern include:

- 1. Contaminated soils at Steel Lined Pit;
- 2. EDB contaminated soils in Study Area 2 of Impact Area;
- 3. Contaminated soils at firing and target areas of KD Range;
- 4. Contaminated soils at J-3 Wetland;
- 5. Contaminated soils at Gun Positions 7, 16 and, if determined necessary, Gun Position 9; and
- 6. Contaminated soils at the Armored Personnel Carrier.

EPA may identify additional RRA Areas of Concern as data warrants.

II. DELIVERABLES

The following deliverables and plans shall be submitted to EPA and implemented pursuant to the schedule provided in Section III of this SOW.

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A. Rapid Response Action Work Plan

Respondent shall submit a Draft Rapid Response Action Work Plan in accordance with Section III of this SOW. After receipt of EPA's comments, Respondent shall submit a Final Work Plan.

- 1. The Plan shall include, at a minimum:
- a. Proposed cleanup standards, with a detailed justification for any proposed level other than background.
- b. Proposed methods and evaluation criteria to measure the effectiveness of the source control response action. These may include soil and sediment sampling, geophysical techniques, and the installation and sampling of monitoring wells.
- c. A plan for the excavation and treatment and/or disposal of all contaminated soils, sediments and debris that meets the following criteria:
 - Eliminates any risk of migration of contaminants to groundwater;
 - Allows for a margin of safety for the inaccuracies associated with the excavation in these conditions;
 - Minimizes the potential for contaminant transport during the action; and
 - Is consistent and is designed to be compatible with all source control measures, to the extent practicable.
- d. A detailed description of the approach for contaminated soil, sediment and debris excavation including:
 - Methods for excavation;
 - The equipment and construction methods to be used;
 - An estimate of the volume of soil, sediment and debris to be excavated;
 - A description of the transportation and handling of contaminated materials; construction access and transportation routes, how and where the soils and sediments will be temporarily stockpiled and staged, and the location of any decontamination facilities and staging areas for "clean" materials;
 - A treatment/disposal method or methods for the contaminated soils, sediments, debris, and any contaminated water generated during the Rapid Response Action. If off-site disposal is proposed, then the Respondent shall provide a list of proposed ultimate disposal facilities that are in compliance with EPA's Off-Site Rule;

- A description of air, erosion, and sediment control procedures to prevent the spread of contaminants during Rapid Response Action activities.
 Respondent shall propose a mitigation, measurement, and monitoring plan to assess compliance with this performance standard;
- A summary of pre-construction data needs which may include, but are not limited to, biota monitoring; background air monitoring; and sediment and soil sampling;
- A summary of any additional sampling including: sampling required by potential disposal facilities; sampling to determine compliance with performance standards; perimeter air monitoring; and post-excavation soil and sediment sampling;
- A habitat assessment and restoration plan. The restoration plan shall include proposed performance standards and a post-construction monitoring plan; and
- A contingency plan for all Rapid Response Action activities that will detail steps necessary to prevent and respond to accidental spills and releases that may occur during Rapid Response Action activities.
- 2. A proposed schedule, which at a minimum, identifies time frames (start and finish dates) for each phase of the cleanup work. The schedule shall include appropriate review time for EPA for subsequent submittals (including a Draft Work Plan) based on their complexity. Respondent shall submit the Draft RRA Work Plan to EPA on or before March 1, 2000. Construction activities for source control shall be completed by October 1, 2000. Site restoration activities shall be completed by December 1, 2000.

Minimum Requirements. All Rapid Response Actions shall be designed to assure that all Drinking Water Standards, including Health Advisories, DWELs and MCLs are met in groundwater underlying and down gradient of the areas of concern.

B. Respondent shall develop a Site Specific Health and Safety Plan and Quality Assurance Plan under which it will conduct Rapid Response Actions. To the extent such plans already exist for work being conducted at MMR, Respondent may identify such preexisting plans. If no such plan currently exists, Respondent shall develop such plans for review and approval by EPA. The Respondent shall ensure that all persons performing on-site work identified in the Work Plan shall comply with the requirements of the Health and Safety Plan and QAP.

The following are the minimum requirements for the Health and Safety Plan(s):

- 1. Designation of an on-site safety and health supervisor, definition of his or her role and authority, and a listing of other critical personnel (including the alternate supervisor) who will assist the supervisor;
- 2. Characterization of the health and safety risk or hazard analysis for each task

- and/or operation anticipated;
- 3. Specification of the appropriate levels of personal protective equipment that shall be worn to conduct the tasks and/or operations identified in the Work Plan; and
- 4. Specification of training and medical monitoring requirements. All personnel entering the exclusion zone or contamination reduction zone shall have completed training and medical monitoring for hazardous waste site work in accordance with the OSHA standard 29 CFR 1910.120. Documentation of adequate training and medical monitoring shall accompany each employee to the Site and be available for review by EPA. Based upon the anticipated season when work will be performed and the required level of personal protective equipment, potential site-specific health hazards including physical stress due to temperature should be addressed (specifically heat stress monitoring);
- 5. Specification of the frequency and types of air and personal monitoring, the identification of the environmental sampling methods and the monitoring instrumentation (e.g., personal air sampling devices with filter cassettes), and specify the analytical methods;
- 6. Specification of site control measures including a site map with initial delineation of work zones (as zones change, the map shall be amended), as well as how the work zones will be cordoned off;
- 7. Description of decontamination procedures for personnel, equipment and machinery that will be used to conduct the tasks and/or operations as identified in the Work Plan;
- 8. Inclusion of an emergency response plan (contingency plan). This plan shall describe the appropriate responses to situations that may be reasonably anticipated to arise during the course of work implementation. The emergency response plan shall include site egress routes, procedures for notification of local authorities, a list of emergency phone numbers and a map that identifies the location and the route to the nearest hospital equipped to accept injured personnel; and
- 9. Description of the precautions to be taken to ensure the safety of local residents from site activities. This description shall include, but shall not be limited to, conducting air monitoring and implementing control procedures to minimize migration of contaminants while cleanup operations are conducted.

The Respondent shall provide a QAP that will ensure that standards for sample collection and data generation are adhered to throughout the Rapid Response Actions.

The selection of methods for field and laboratory analysis shall be consistent with EPA's "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans" published by EPA Office of Research and Development (QAMS-005/80, EPA-600/4-83-004; NTIS PB 83-170514, December 1980), and quality assurance/quality control (QA/QC) procedures shall meet or exceed those specified in the "Interim Final Guidance for the Quality Assurance/Quality Control Guidance for Removal Activities" published by the Emergency Response Team, Emergency Response Division (EPA/540..., OSWER

Directive 9360.4-01, dated April 1990).

C. Completion of Work Report

Respondent shall submit a Completion of Work Report, as required by the Order, upon completion of the tasks specified in this SOW and subsequent approved Work Plan(s). The Completion of Work Report shall at a minimum;

- 1. Document the work performed;
- 2. Document any difficulties encountered, if applicable;
- 3. Document the results of post-excavation sampling (i.e., before backfilling and restoration), and compliance with performance standards;
- 4. Provide a written and tabular summary of treatment/disposal activities; and
- 5. Provide results from post-construction habitat restoration monitoring and document corrective actions and compliance with the performance standards.

I. Additional Work

At any time during the implementation of this SOW, Respondent may submit to EPA a proposal to collect additional information required to perform the Rapid Response Actions.

Also at any time, EPA may determine that additional tasks may be necessary in order to achieve the objectives of the Order, this SOW, and the SDWA. For example, if additional contamination is identified, and EPA determines that such condition or conditions pose additional threats, EPA may require additional Rapid Response Actions to address such threats. Respondent shall implement all such tasks as directed by EPA.

III. SCHEDULE

Respondents shall submit deliverables and conduct the Rapid Response activities in accordance with the following schedule.

A. Within seven days of the effective date of this Order, Respondent shall notify EPA in writing of the name of the Project Coordinator proposed by the Respondent to coordinate the work as specified in the Order and the SOW, and of the name, qualifications and references for an environmental consultant (Supervising Contractor) who will provide services detailed in the SOW.

- B. On or before **February 1, 2000**, Respondent shall meet with EPA to discuss the status of the required submittals and technical issues. EPA may require additional progress meetings throughout the duration of the Rapid Response Action.
- C. On or before **March 1, 2000**, Respondent shall submit the Draft Rapid Response Action Work Plan, which shall include a HASP and QAP, to EPA for review and approval. Subsequent submittals shall be provided in accordance with a schedule proposed by Respondent and approved or modified by EPA.
- D. Within **fourteen (14) days** after EPA approval of the RRA Work Plan or a segregable component of the RRAWork Plan, unless otherwise agreed to by EPA, the Respondent shall commence with the approved portion of work.
- E. Within **forty-five** (**45**) **days** after completing all cleanup activities, including restoration activities, the Respondent shall submit the Completion of Work Report to EPA for review and approval.

IV. NOTIFICATION AND COMMUNICATION

- A. Respondent shall provide advance notification to EPA of any planned field activities related to this Order including, but not limited to, the following:
 - 1. **Four (4) days** advance notice of any sampling activities. This will ensure sufficient lead time for EPA to schedule sample analysis slots for any confirmatory sampling required. Should an unanticipated occurrence require collection of samples (e.g., an emergency), Respondent shall notify EPA of the sampling event as soon as practicable.
 - 2. **Three (3) days** advance notice of other field work, for example, commencement of actual on-site work activities.
- B. Respondent shall submit written Progress Reports to the EPA TPC every week when onsite activities occur. The Progress Reports shall include at a minimum a chronological
 description of the tasks performed (with attached diagrams, if necessary), the number and
 location of samples collected, the amount of contaminated materials transported off site,
 reports received, reports prepared, and other work required and performed under this
 Order. Respondent shall also submit photodocumentation and supporting documentation.
 The Progress Reports shall also include a brief description of tasks to be performed in the
 following two reporting periods and shall be submitted on the Tuesday following the
 reporting period.
- C. Respondent shall submit monthly reports to the EPA TPC when there are no on-site activities. The reports shall include a update on the status of Reports, other deliverables

and schedules.

- D. All maps, analytical results, sample locations, etc. shall be submitted in both paper and electronic format. The electronic format shall be compatible with EPA's GIS system. EPA will provide the Respondent with information on EPA's existing software and electronic format requirements.
- E. In addition to any provisions of the Order or SOW requiring submission of deliverables, plans, or other documents to EPA, Respondent shall also submit any or all such documents to the Impact Area Review Team